



Communication Design Quarterly

Abstract Showcase

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Here are a few of the articles that we have published **Online First**.

Featuring Work By

Claire Lauer • Brett Oppegaard • J.D. Applen • Jennifer Roth Miller • Brandy Dieterle • Jennifer deWinter • Stephanie Vie • Sonia H. Stephens • Daniel P. Richards • Sean Williams • Clay Spinuzzi • Curtis Newbold • Nupoor Ranade • Jason Swarts • Richard Colby • Rebekah Shultz Colby • Joseph Bartolotta • Ryan Rogers • Laura Dunlow • Kristin Marie Bivens • Victor Del Hierro • Michael Meng • Stephanie Steinhardt • Andreas Schubert • Avery C. Edenfield • Ryan Eichberger • Lauren E. Cagle • Carl Herndl • Barbara George • Brian Ballentine • Laura Vernon • Ehren Helmut Pflugfelder • Lin Dong • Sherena Huntsman • Jared S. Colton • Christopher Phillips • Kevin Garrison • Laura Gonzales • Nadya Shalamova • Tammy Rice-Bailey • Katherine Wikoff • Teena A.M. Carnegie • Kate Crane • Amber Swope • Ann Hill Duin • Jason Chew Kit Tham • Benjamin Lauren • Anthony T. Atkins • Colleen A. Reilly • Jennifer C. Mallette • Megan Gehrke • Emma Rose • Alison Cardinal • Liz Hutter • Halcyon M. Lawrence • Katie Lynn Walkup • Heidi L. Everett • Luke Thominet • Cody Reimer • Samantha Cosgrove

Implementing a transactional design model to ensure the mindful development of public-facing science communication projects

Claire Lauer

This paper introduces the concept of transactional design—integrating Druschke’s “transactional” model of rhetoric and science and Kinsella’s model of “public expertise”—to demonstrate how technical communication and user experience (UX) designers and researchers can play an essential role in helping scientists cultivate meaningful relationships with members of the public toward the goal of making scientific content more accessible and actionable. It reports on the challenges that arose when a water modeling system built for experts was adapted for a public museum audience; discusses specific issues the UX team had in contending with outdated “deficit” and “conduit” models of communication when working with scientists to adapt the system; provides a checklist for steps that technical communication and UX designers and researchers—as those who best understand audiences and work directly with users—can champion the idea of transactional design to setup knowledge-making partnerships toward the co-construction of public-facing scientific communication projects.

July 2020

Volume 8, Issue 2

Prototyping and public art: design and field studies in locative media

Brett Oppegaard

This experience report shares lessons learned from a multi-staged prototyping process, over a five-year period, that involved the creation and iterative development of a mobile platform and dozens of prototype examples of interactive locative-media artifacts, including locative journalism. Thematically linked to a public art collection, the mobile app was designed as a research instrument aimed at an external audience of passersby, actively using smartphones. This paper documents and outlines key decisions made about the platform and content in response to observed experiences. It also identifies emergent areas of research potential intertwined in the undertaking of such a prototyping process.

Using Bayesian induction methods in risk assessment and communication

J.D. Applen

Bayes’s theorem allows us to use subjective thinking to find numerical values to formulate assessments of risk. It is more than a mathematical formula; it can be thought of as an iterative process that challenges us to imagine the potential for “unknown, unknowns.” The heuristics involved in this process can be enhanced if they take into consideration some of the established risk assessment and communication models used today in technical communication that are concerned with the social construction of meaning and the kairos involved in rhetorical situations. Understanding the connection between Bayesian analysis and risk communication will allow us to better convey the potential for risk that is based on probabilistic assumptions.

April 2020

Volume 8, Issue 1

Social media in professional, technical, and scientific communication programs: a heuristic to guide future use

Jennifer Roth Miller, Brandy Dieterle, Jennifer deWinter, Stephanie Vie

This article reports on the results of a research study supported by a CPTSC research grant that analyzed programmatic use of social media in professional, technical, and scientific communication programs (TPCs). This mixed-methods study included a survey of TPC program administrators (n = 29), an inventory of TPCs' social media account use (n = 70), and an inventory of TPCs' course offerings that included social media (n = 27). Results showed that programmatic use of social media requires strategic consideration, particularly in order to generate two-way communication, a goal of many of the TPCs studied. To that end, our article generates questions and guiding suggestions (drawn from our three-part study) to guide administrators who wish to include social media in their TPC.

Story Mapping and Sea Level Rise: Listening to Global Risks at Street Level

Sonia H. Stephens, Daniel P. Richards

While interactive maps are important tools for risk communication, most maps omit the lived experiences and personal stories of the community members who are most at risk. We describe a project to develop an interactive tool that juxtaposes coastal residents' video-recorded stories about sea level rise and coastal flooding with an interactive map that shows future sea level rise projections. We outline project development including digital platform selection, project design, participant recruitment, and narrative framing, and tie our design decisions to rhetorical and ethical considerations of interest for others developing interactive tools with community participation.

December 2019

Volume 7, Issue 4

Humanistic Communication in Information Centric Workplaces

Nupoor Ranade, Jason Swarts

Professional writers adapt their skills to suit expanded professional roles that involve production and management of information, but preparation through mere skill-based training is problematic because that communication work is messy in ways that are not addressable through simple skills training. We must understand how skills "influence and shape the discursive activities surrounding their use" (Selber, 1994). This paper reports the results of a study of people trained in humanities disciplines like communication, English, writing studies, technical communication, etc., on how they have found means to employ their training in their workplace and keep what is humanistic about writing and communicating at the foreground of their interactions with information technologies. Instead of focusing on technology alone, this research encourages a unified approach to preparing students for the workplace.

Author Spotlight

Brett Oppegaard



Brett Oppegaard, PH.D., is an Associate Professor and the Undergraduate Chair of the Journalism program at the University of Hawai'i, studies intersections of Technical Communication, mobile technologies, and media accessibility. His research has been published in such academic journals as *Technical Communication*, *Mobile Media and Communication*, and the *Journal of Technical Writing and Communication*, among others. His scholarship has been supported by federal agencies - such as the National Endowment for the Humanities, the National Endowment for the Arts, and the National Park Service - but also by private foundations and corporations, such as Google. For this work, he has earned such accolades as the MUSE Award for Research and Innovation from the American Alliance of Museums, the George and Helen Hartzog Award from the National Park Service, and the Margaret Pfanstiehl Audio Description Achievement Award in Research Development from the American Council of the Blind.

Toward a Heuristic for Teaching the Visual Rhetoric of Pitch Decks: A Pedagogical Approach in Entrepreneurship Communication

Sean Williams, Clay Spinuzzi, Curtis Newbold

This study examined how three successful entrepreneurs/investors assessed the visual rhetoric of actual pitch decks from novice entrepreneurs. We compare their evaluations to the result of a heuristic for assessing visual rhetoric, Color CRAYONTIP. While the pitch deck is recognized as a key artifact in entrepreneurship, no studies have specifically addressed the visual design of the deck nor the key design skills novice entrepreneurs should implement to effectively persuade potential investors of the idea's promise. This preliminary and exploratory case study begins a dialogue on this topic by performing a visual analysis of seven novice decks which were deemed successful by experienced angel investors. The analysis revealed five key skills that appear to account for the success of these decks with the reviewers: rhetorical awareness, typography, color, photography, and contrast.

September 2019

Volume 7, Issue 3

Usability testing for oppression

Joseph Bartolotta

This study examines a document produced by the United States Department of Homeland Security handed out to immigrant parents during the "Family Separation Policy" crisis of 2018. The article examines whether such a document could be ethically tested for usability. Ultimately, the text argues that by the standards of the Belmont Report and the best practices in usability research, such a document would be extremely difficult (if not impossible) to test ethically. It argues that, while usability testing is an excellent tool for exploring how users interact with texts that can have life-changing consequences, it may also be used as a tool to perpetuate injustice and marginalize potential users.

Game Design Documentation: Four Perspectives from Independent Game Studios

Richard Colby, Rebekah Shultz Colby

Changes in technology, development philosophy, and scale have required game designers to change how they communicate and mediate design decisions. Traditional game design studios used an extensive game design document (GDD), a meta-genre that described most of the game before it was developed. Current studies suggest that this is no longer the case. We conducted interviews at four independent game studios in order to share their game design documentation processes, revealing that, while an exhaustive GDD is rare, the meta-genre functions are preserved in a variety of mediated ways.

Author Spotlight

Richard Colby



Dr. Richard Colby has been teaching at the university level for over 20 years, and throughout that time, has integrated games and game-like elements in his courses. He has several publications on using games to better teach writing, rhetoric and research. He is co-editor, along with Rebekah Shultz Colby and Matthew S. S. Johnson, on a collection on the ethics of playing, researching, and teaching games. His current research interest is on the evolution and roles of writing in the games industry.

Author Spotlight

Rebekah Shultz Colby

Dr. Rebekah Shultz Colby is a Teaching Professor in the University of Denver Writing Program. She uses games to teach rhetoric and writing. For instance, she teaches technical communication by using gaming walkthroughs and discussion forum posts. She, Richard Colby, and Matthew S. S. Johnson are completing a forthcoming edited collection exploring the ethics of playing, researching, and teaching games.



Testing the Difference Between Appearance and Ability Customization*Ryan Rogers, Laura Dunlow*

Gaming literature largely treats customization as a monolithic concept. This article provides three experiments that test the differences between appearance customization and ability customization. While these three studies provided a degree of replication, they examined between 105 and 147 college students in three different video game scenarios (no game play, non-human avatar, and difficult game). While the results varied slightly based on the scenario, evidence emerged that appearance customization was more likely than ability customization to enhance participant attitude toward the game and likelihood to spend money on the game. The findings of these studies should inform the types of customization used in a variety of domains and should provide guidance on the design process to offer simple and cost-effective methods to improve sales and attitudes toward content. Specifically, appearance customization is a more effective way for organizations to influence users.

Reducing Harm by Designing Discourse and Digital Tools for Opioid Users' Contexts: The Chicago Recovery Alliance's Community-Based Context of Use and PowerBy's Technology-Based Context of Use*Kristin Marie Bivens*

The United States is struggling with an opioid overdose (OD) crisis. The opioid OD epidemic includes legally prescribed and illicitly acquired opioids. Regardless of if an opioid is legal, understanding users' contexts of use is essential to design effective methods for individuals to reverse opioid OD. In other words, if health information is not designed to be contextually relevant, the opioid OD health information will be unusable. To demonstrate these distinct healthcare design contexts, I extend Patient Experience Design (PXD) to include community-based and technology-based contexts of use by analyzing two case examples of the Chicago Recovery Alliance's and PwrDBy's attempts to decrease deaths by opioid OD. Next, I discuss implications of community-based and technology-based PXD within communities of opioid users, critiquing each method and suggesting four contexts of use-heuristic categories to consider when designing health communication information for users in these contexts.

DJs, Playlists, and Community: Imagining Communication Design through Hip Hop*Victor Del Hierro*

This article argues for the inclusion of Hip Hop communities in technical communication research. Through Hip Hop, technical communicators can address the recent call for TPC work to expand the field through culturally sensitive and diverse studies that honor communities and their practices. Using a Hip Hop community in Houston as a case study, this article discusses the way DJs operate as technical communicators within their communities. Furthermore, Hip Hop DJs build complex relationships with communities to create localized and accessible content. As technical communicators, Hip Hop practitioners can teach us to create community-based communication design for more diverse contexts.

How Developers Use API Documentation: An Observation Study

Michael Meng, Stephanie Steinhardt, Andreas Schubert

Application Programming Interfaces (APIs) play a crucial role in modern software engineering. However, learning to use a new API often is a challenge for developers. In order to support the learning process effectively, we need to understand how developers use documentation when starting to work with a new API. We report an exploratory study that observed developers while they solved programming tasks involving a simple API. The results reveal differences regarding developer activities and documentation usage that a successful design strategy for API documentation needs to accommodate. Several guidelines to optimize API documentation are discussed.

Queering consent: design and sexual consent messaging

Avery C. Edenfield

For decades, sexual violence prevention and sexual consent have been a recurrent topic on college campuses and in popular media, most recently because of the success of the **#MeToo** movement. As a result, institutions are deeply invested in communicating consent information. This article problematizes those institutional attempts to teach consent by comparing them to an alternative grounded in queer politics. This alternative information may provide a useful path to redesigning consent information by destabilizing categories of gender, sexuality, and even consent itself.

Maps, Silence, and Standing Rock: Seeking a Visuality for the Age of Environmental Crisis

Ryan Eichberger

In 2016, the Standing Rock Sioux Tribe founded the Sacred Stone Camp to protest Dakota Access Pipeline construction. The ensuing conflict was constructed both physically and digitally--- especially through maps. These maps made strategic inclusions and exclusions, which in turn offered differing concepts of civic, national, and historical identity. In this study, I trace some of these stories, inviting technical and professional communicators to rethink how they visualize systemic issues involving human and non-human ecologies. Finally, I suggest the idea of a 'folded rhetoric' to describe a strategic, ethical goal for technical communication in the age of environmental crisis.

Shades of Denialism: Discovering Possibilities for a More Nuanced Deliberation About Climate Change in Online Discussion Forums

Lauren E. Cagle, Carl Herndl

This article explores rhetorical practices underlying productive deliberation about climate change. We analyze discussion of climate change on a Reddit subforum to demonstrate that good-faith deliberation--which is essential to deliberative democracy--exists online. Four rhetorical concepts describe variation among this subforum's comments: William Keith's distinction between 'discussion' and 'debate,' William Covino's distinction between good and bad magic, Kelly Oliver's notion of ethical response/ability, and Krista Ratcliffe's notion of rhetorical listening. Using a three-part taxonomy based on these concepts, we argue that collaborative climate change deliberation exists and that forum participation guidelines can promote productive styles of engagement.

Communicating Activist Roles and Tools in Complex Energy Deliberation

Barbara George

This article analyzes online policy tools used by public participants to participate in complex environmental risk deliberation, specifically in terms of HVHF (high volume hydraulic fracturing). This article argues that institutional environmental deliberation tools, which are increasingly found online, are embedded in ideological discourse frames that are often at odds with public user ideologies. This article argues that environmental deliberation tools designed and created by stakeholders through participatory design models are more effective in promoting complex deliberations about environmental risk. Such participatory tools more clearly take into account environmental justice, intersectional and precautionary considerations.

Rhetoric, risk, and hydraulic fracturing: one landowner's perspective

Brian Ballentine

Claims for America's potential for energy independence are substantiated largely thanks to advancements in an extraction process known as hydraulic fracturing or "fracking." This article focuses on the negotiations among individual landowners and oil and gas companies as they enter into leasing agreements to permit fracking. The author draws on his own experiences as a landowner in the Marcellus and Utica shale region. Of primary concern is how landowners construct their own understanding of risk amidst a network of local, regional, and global actors. Landowner and oil and gas company relationships are analyzed using theories of rhetoric and risk communication.

Author Spotlight

Jason Swarts



Dr. Jason Swarts is a Professor specializing in technical communication and the Associate Head of the Department of English at North Carolina State University. He teaches courses on a variety of subjects, but recently has focused on technical communication, information architecture, and discourse analysis. His research is on mobile communication and computer-supported cooperative work.

Risk Selfies and Nonrational Environmental Communication

Ehren Helmut Pflugfelder

Risk associated with a Pacific Northwest earthquake was expressed through a moderately successful social media risk communication campaign known as #14gallons. #14gallons encouraged people to collect and store 14 gallons of fresh water per person and take a selfie with their water, tagging others to do the same. This article frames the hashtag campaign within scholarship on the rhetoric of risk, defines the genre of the “risk selfie,” and then uses a modified version of Laurie Gries’s iconographic tracking method to produce information about the campaign that can be productively employed by risk communication practitioners.

Crossing Political Borders: How a Grassroots Environmental Group Influenced a Change in Public Policy

Laura Vernon

This study is a rhetorical analysis of communication design in the Amalga Barrens wetlands controversy during the 1990s. The Bridgerland Audubon Society in Cache Valley, Utah, was able to influence a change in public policy that removed the unique wetlands from consideration as a possible reservoir site for water taken from the Bear River. The group tried two times to influence public policy. The first effort failed because the group relied too much on lobbying. The second effort succeeded when the group developed a grassroots communication design. Bridgerland led a successful grassroots effort by (1) educating the public, (2) establishing credibility, (3) proposing an alternative solution, (4) making decisions based on data, (5) recognizing common ground, (6) getting the media involved, (7) building on what has been done before, and (8) practicing civility. Bridgerland’s experience may be helpful to other environmental groups that are trying to lead efforts in their own communities.

Earth discourses: constructing risks and responsibilities in Chinese state and social media

Lin Dong

Defining global warming as a rhetorical construct built by stakeholders, this study investigates how Chinese state and social media understand risk and responsibility regarding climate change. This multi-layer, multi-dimensional, statistical and qualitative textual analysis focuses on the ratification and implementation of the Paris Agreement and the U.S. withdrawal from it. Findings indicate that a new green public sphere led by grassroots experts and aided by lay people is burgeoning in China and changing the way people conceptualize environmental risks and engage in environmental protection. With theoretical and methodological innovations, this study contributes to the emerging field of transnational environmental communication.

Theorizing Lip Reading as Interface Design: The Gadfly of the Gaps*Kevin Garrison*

This article explores what lip reading can teach us about interface design. First, I define lip reading. Second, I challenge the idea that people can “read” lips—an idea that is deeply imbedded in the literate tradition described by Walter Ong (1982) in *Orality and Literacy*. Third, I frame lip reading as a complex rhetorical activity of filling in the “gaps” of communication. Fourth, I present a lip reading heuristic that can challenge those of us in communication related fields to remember how the invisible “gaps” of communication are sometimes more important than the visible “interfaces.” And finally, I conclude with some reflections about how lip reading might “reimagine” disability studies for technical and professional communicators.

Cultivating Virtuous Course Designers: Using Technical Communication to Reimagine Accessibility in Higher Education*Sherena Huntsman, Jared S. Colton, Christopher Phillips*

Technical communicators are often charged with creating access to meaning through technology. However, these practices can have marginalizing effects. This article argues for reimagining accessibility through virtue ethics. Rather than identifying accessibility as an addition to document design or a set of guidelines, virtue ethics situates accessibility as a habitual practice, part of one’s character. This article describes the application of virtue ethics in a university partnership, which sought to create a culture of accessibility through three goals: to consider accessibility as an ongoing process, to consider accessibility as a “vital” part of all document design, and to recognize accessibility as a shared responsibility among stakeholders. Focusing on the virtues of courage and justice, we interpret data from a survey of instructors and then provide suggestions on how others can join the accessibility conversation.

Designing for Intersectional, Interdependent Accessibility: A Case Study of Multilingual Technical Content Creation*Laura Gonzales*

Drawing on narratives (Jones, 2016; Jones & Walton, 2018) from bilingual technical communication projects, this article makes a case for the importance of considering language access and accessibility in crafting and sharing digital research. Connecting conversations in disability studies and language diversity, the author emphasizes how an interdependent (Price, 2011; Price & Kerchbaum, 2016), intersectional (Crenshaw, 1989; Medina & Haas, 2018) orientation to access through disability studies and translation can help technical communication researchers to design and disseminate digital research that is accessible to audiences from various linguistic backgrounds and who also identify with various dis/abilities.

Author Spotlight

Nupoor Ranade



Nupoor Ranade is a Ph.D. Candidate in the Communication, Rhetoric, and Digital Media program at the North Carolina State University. Her research focuses on audience analysis, computational social science, digital rhetoric, and information design primarily in the field of technical communication. Through her work and partnerships with the industry, she attempts to explore interdisciplinary collaborative work which helps in redefining perceptions of digital literacy and audiences to enhance pedagogical scholarship.

Evolving Skill Sets and Job Pathways of Technical Communicators

Nadya Shalamova, Tammy Rice-Bailey, Katherine Wikoff

Recent research in technical communication (TC) indicates that the field has become more varied than ever in terms of job titles, job skills, and levels of involvement in the design and production process. Here, we examine this diversity by detailing the results of a small-scale anonymous survey of individuals who are currently working as TCs. The purpose of our survey was to discover what job titles people who identify as TCs have held and the skills required of those positions. The study was conducted using the online survey platform Qualtrics. Survey results found that TCs occupy jobs and use skills that are often quite different from “traditional” TC careers. Results further support previous research that these roles and responsibilities continue to evolve. However, results also suggest that this evolution is more sweeping than previously realized—moving TCs away from not only the traditional technical writing role but also the “technical communicator” role as it has been understood for the past 20–25 years.

Responsive Curriculum Change: Going Beyond Occupation Demands

Teena A. M. Carnegie, Kate Crane

This experience report highlights one program’s approach to curriculum revision as the program moved from being an emphasis within a literature degree to a B.A. degree in technical communication. The major curriculum was designed by researching state and regional needs for technical communication education in addition to using research already conducted and published in the field. Through an examination of the skills technical communicators needed to be successful in the workplace and how those skills transfer to other related occupations, we were able to build a successful major. The revised curriculum used an interdisciplinary approach to include courses in technical communication, visual design, and public relations. Further, this report discusses the iterative programmatic changes necessary to keep the major current. From alumni interviews and secondary research on changes in technical communication, we continue to reassess the skills students need. As a result our program continues to evolve to equip students with technical communication skills that apply to various, related occupations.

Cultivating Code Literacy: Course Redesign Through Advisory Board Engagement

Ann Hill Duin, Jason Chew Kit Tham

This experience report shares the story of course redesign for cultivating technological and code literacy. This redesign came about as a result of listening to advisory board members as well as responding to recent scholarship calling for more specifics on the teaching of component content management and content strategy. We begin with discussion of code literacy differentiation between code-as-language, code-as-tool, and code-as-structure. We then share detail about our advisory board engagement and the resulting advanced-level technical communication course in which, framed by technological literacy narratives, students produce a static HTML site for a client, develop a repository for this work (GitHub), use XML and the DITA standard for dynamic document delivery, and create a digital experience element to accompany the site. We document and analyze student narratives and online course discussions. We emphasize a more holistic approach to code literacy and that course redesign should be a collaborative endeavor with advisory board members and industry experts. Through these experiences, students gain requisite knowledge and practice so as to enter the technical communication community of practice.

Information Architects: What They Do and How to Become One

Amber Swope

Every organization relies on information to communicate with prospects and customers -- blog posts, articles, whitepapers, user manuals, web portals, videos, tweets, social media posts, moderated forums, and more. This means that many people are creating content and are delivering it in multiple ways. To meet our users' needs, we need information architecture (IA) to provide the framework for developing and delivering this information. Although most content creators do not think of themselves as information architects, many of them perform tasks that are information architecture responsibilities. If you decide what information gets created and delivered, identify keywords to support findability, or organize the hierarchy for a table of contents, you are performing IA tasks. To learn who was performing these tasks and how they ended up with this role, I conducted a survey. This article presents my analysis of the results based upon my experience and relevant industry sources.

Preparing Communication Design Students as Facilitators: A Primer for Rethinking Coursework in Project Management

Benjamin Lauren

Building from previous work, this brief teaching case provides a rationale for coursework in project management that draws from experiential learning to teach facilitation. The case begins by providing a research context for how communication designers are increasingly focused on practices of facilitation in their work, particularly in fast-paced, distributed work environments. The case presents two metaphors for helping students think about facilitation techniques. Then, the article describes a project management course that emphasizes the importance of facilitation in classroom exercises and major assignments by developing skills in three foundational areas: improvisation, document design, and systems design. Each area is described with examples to help instructors of project management adapt or use similar approaches at their own unique institutional, programmatic, and classroom contexts. The article concludes with four suggestions, such as partnering with industry practitioners and arranging site visits to see project management in action.

Theory to Practice: Negotiating Expertise for New Technical Communicators

Jennifer C. Mallette, Megan Gehrke

In technical communication, discussions on how to best prepare graduates to meet workplace challenges range from responding to changing technology and occupational needs to focusing on creating flexible workers. Part of this conversation centers on expertise: what kinds of expertise are most valued and how can graduates be trained to be experts? In this article, we explore our field's understandings of expertise by focusing on a recent master's graduate and practitioner, Megan. As first an intern then a full-time employee at HP Inc, Megan experienced clashes between the classroom and workplace, which she sought to reconcile. In addition, she also had to learn to assert herself as a subject matter expert (SME) while working alongside SMEs. This navigation was not something her education necessarily prepared her for, and when compared to surveyed graduates' experiences, may be something programs could emphasize. We conclude with recommendations for how academic programs can incorporate conversations about expertise and equip students to assert themselves as communication SMEs and build on that expertise after graduation.

Pedagogical Strategies for Integrating SEO into Technical Communication Curricula

Anthony T. Atkins, Colleen A. Reilly

Preparing students to understand and practice search engine optimization (SEO) teaches them writing skills, technological literacies, and theoretical background needed to pursue a successful technical communication career. SEO employs a multifaceted skillset, including an understanding of coding, skills in shaping and crafting effective user experience (UX), marketing skills, effective research strategies, and competence in accessibility. We argue that instruction in SEO in undergraduate and graduate programs in technical communication prepares graduates for the interdisciplinary and agile profession and enables them to be successful in positions from information architect to technical editor. Our article details how studying and enacting SEO helps students to develop proficiencies and knowledge central to technical communication pedagogies, including technological literacies, an understanding of the interconnections between human and non-human actors in digital spaces, and the ethical concerns central to work within those spaces.

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Participatory Video Methods in UX: Sharing Power with Users to Gain Insights into Everyday Life

Emma Rose, Alison Cardinal

As technologies proliferate into all aspects of daily life, UX practitioners have the ability and responsibility to engage in research to help organizations better understand people's needs. We argue that UX practitioners have an ethical commitment to deploy methods that consciously shift power to create a more equitable relationship between researcher and participants. This article offers participatory video as a method for UX practitioners that democratizes the design process and creates rich visual data. We detail two cases of participatory video methods and how they were used to explore the potential of participatory methods in UX.

Promoting Inclusive and Accessible Design in Usability Testing: A Teaching Case with Users Who are Deaf

Liz Hutter, Halcyon M. Lawrence

Drawing on an analysis of a usability teaching case with users who are deaf and who communicate using American Sign Language, we argue that there is a need for industry and the academy to refocus on more accessible testing practices, situated more decidedly within the social, cultural, and historical contexts of users. We offer guidelines for more inclusive practices for testing with users who are deaf prompting designers, developers, and students to think about systems of behavior, such as audism, cultural appropriation, and technological paternalism that undermine accessibility in their design and practices. More broadly, we propose ways in which instructors of technical communication can leverage usability tools and research methods to help students better understand their users for any artifact they design and create.

Connect with Your Patients, Not the Screen: Usability Claims in Electronic Health Records

Katie Lynn Walkup

This article examined the usability claims that Electronic Health Records (EHRs) make to healthcare providers. Usability claims appear as statements that persuade users to adopt the interface based on usability or user experience. These claims may show what healthcare providers are presumed to require from online health technologies. Usability claims in this study included intuitive interfaces, adaptability of documentation and records, and supplementing patient communication. Analyzing usability claims then becomes a way of understanding healthcare providers, their patients, and the technologies both use for health communication.

Is Good Enough Good Enough?: Negotiating Web User Value Judgments of Small Businesses Based on Poorly Designed Websites

Heidi L. Everett

This article explores whether amateur Web designs would deter Web users from engaging with a business after viewing a wWebsite--- and if their expectations and value judgments are influenced by business size and scope. This topic is important to small business owners, practitioners, and educators because credibility judgments by Web visitors may be quick and detrimental to a small business if they do not yield a positive response and subsequent engagement with the small business. This study provides an opportunity to broaden our understanding of Web visitor credibility judgments about small businesses and introduces a new thread to the discussion about alignment of consumer expectations, Web design teaching, industry best practices, and the shaping of universal values as they relate to the rhetoric of the Internet.

Not a Cape, but a Life Preserver: The Importance of Designer Localization in Interactive Sea Level Rise Viewers

Daniel P. Richards

Interactive sea level rise viewers (ISLRVs) are an increasingly popular risk communication technology designed to help users visualize the effects of water inundation on their region so as to facilitate more prudent decision-making. Designed by and for a variety of stakeholders, these viewers generally have as their goal affording users a more “localized” experience with climate change and sea level rise data, allowing users to explore as specific as street-level the effects of rising waters in coastal regions. While the rise of these tools mirrors the trend in risk communication scholarship towards more localized messaging, there is still more work to be done for a broader public audience. This article presents the results of a user experience study conducted with 12 residents of a coastal region, which formulate an attempt to develop more insight into techniques for designer localization. This article concludes with concrete recommendations for scholars and practitioners concerned with designing more effective interactive risk communication technologies that respond to the public need for localized information for decision-making.

How to be Open: User Experience and Technical Communication in an Emerging Game Development Methodology

Luke Thominet

This study builds a model of open video game development, an emerging user-centered design practice where a developer publicly releases an incomplete game and iterate on it while gathering feedback from the player community. It argues that open development is fundamentally a communication and user experience practice characterized by a commitment to access, transparency, and feedback. Ultimately, it shows open development as a practice where game developers are consciously designing a compelling experience of participation in user research.

Contextual Cropping, Collateral Data: Screenshot Methods of UX Research

Cody Reimer

This article presents a novel method for data collection. It relies on a larger case study of the game League of Legends to forward the concepts of contextual cropping and collateral data. Contextual cropping gives researchers recommendations for gathering data with screenshots while respecting the in situ ecology of that data. Contextual cropping complements screenshot data with contextual metadata and offers potential collateral data with which to further texture research.

Exploring Usability and User-Centered Design through Emergency Management Websites: Advocating Responsive Web Design

Samantha Cosgrove

This study explores the usability of the Department of Homeland Security and Emergency Management's (DHSEM) website, applying theories of user experience design (UXD) to emphasize the importance of responsive web design in practice. By rhetorically analyzing the usability of their websites, such as FEMA and Ready at the national and local level, DHSEM becomes a model for the needs of future research and application of user centered design principles. Responsive web design within emergency management websites should be considered when first evaluating usability and user experience design because of the real-life implications of these interactions. By reviewing basic design principles on emergency management websites, this article further showcases the capabilities responsive web design, usability and user centered design in digital spaces.

A Brief History of CDQ



SIGDOC **runs** the
Journal of Computer Documentation
from 1988-2002

Communication Design Quarterly (CDQ) is the journal-format, peer-reviewed publication managed by SIGDOC, the Association for Computing Machinery (ACM)'s Special Interest Group on Design of Communication. The email-only newsletter that would become CDQ published its first issue in March 2001, and since then, more than 17 volumes, each containing approximately 4 issues, have been published.

ACM chairperson asks Robert Pierce to **publish** a quarterly informational newsletter for SIGDOC members, email format



Prior to 2001, SIGDOC had a peer-reviewed journal entitled Journal of Computer Documentation, which continued from 1988 to 2002. When it became difficult to find contributors, the journal shut down. The chair of ACM at the time, Kathy Haramundanis, asked SIGDOC board member Robert Pierce to write a quarterly newsletter as a subscription service to SIGDOC members because he was in the technical communication industry rather than academia, and his views would offer valuable industry/academic crossovers.

CDQ is **founded**: Michael Albers and Liza Potts take over the newsletter, transition to stable online format and restart volume numbering, and peer review begins for research-based articles

2012

The original purpose of Robert Pierce's newsletter was to give the members of SIGDOC something more than a website and yearly conference. Pierce wrote mostly from experience, and the newsletter was not peer-reviewed or research-based. Common topics included software development, user experiences, change management, content design, customer feedback, and information development and delivery.

In September 2012, Liza Potts and Michael Albers transitioned the newsletter to a more stable online format and volume numbering was restarted with Volume 1. It was given the name *Communication Design Quarterly* and began to solicit research-based papers and peer-reviewed articles. Because Liza Potts has a background in research on advocacy for women in the technical communication field, the publication took on a new objective in social justice and cultural awareness in technical communication.

In 2018, CDQ began its Online First publication model, allowing your work to become accessible in a more timely fashion. While CDQ retains its traditional focus on the ways we engage with, produce, and distribute information, we also welcome your work on accessibility, equality, social justice, and cultural awareness in communication design. If you would like to publish in *Communication Design Quarterly*, please contact Dr. Derek G. Ross at derek.ross@auburn.edu.

2018

CDQ begins its **Online First** model

Communication Design Quarterly's Statement

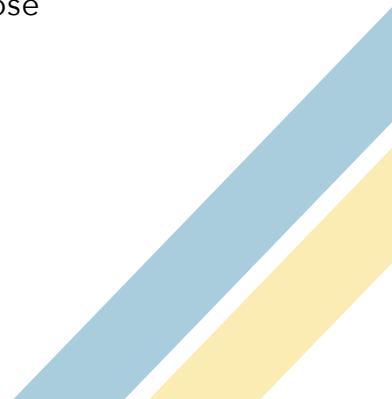
on Inclusivity and Ethical Data Visualization

Communication Design Quarterly invites work by authors of all ethnicities, colors, faith identifications, genders and sexualities, abilities, and levels of academic and professional expertise. Work will be considered for publication based on its potential value to our readership population, as primarily illustrated by members of the Association for Computing Machinery's Special Interest Group for Design of Communication (ACM SIGDOC), and the article's methodological, intellectual, and ethical rigor, as appropriate. Submissions will be assessed by peer-reviewers chosen by the Editor based on how potential reviewer's expertise relate to the submitted work's area of focus.

Communication Design Quarterly is committed to publishing inclusive and ethical work, and expects that any work on or with human subjects meets Institutional Review Board or Ethics Board approval, as appropriate. We also respectfully request that authors consider the ethical implications of data visualization, including accessibility issues.

Many articles in *Communication Design Quarterly* are fundamentally based in examination of visuals created by a person or persons external to the author(s), contain visuals created by a person or persons external to the author(s), contain visuals created by the author(s) or in service to the author(s) work, or some combination of the above. We ask that, as authors, you please respect the rights, needs, and expectations of those whom you portray in your work. We also ask that you respect the rights, needs, and expectations of your audience.

We, at *Communication Design Quarterly*, recognize that this statement cannot address all potential vulnerabilities, but ask that you, as readers, authors, and editors in your own right, carefully consider the implications of your work for those whom it engages as both subject and audience.





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